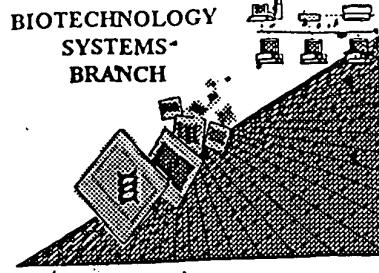


Re-run

RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/719261

Source: PCT

Date Processed by STIC: 08 30 2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
<http://www.uspto.gov/web/offices/pac/checker>

Raw Sequence Listing Error Summary

ERROR DETECTED **SUGGESTED CORRECTION** **SERIAL NUMBER:** 09/719261

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 Wrapped Nucleic
 Wrapped Aminos
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2 Invalid Line Length
The rules require that a line not exceed 72 characters in length. This includes white spaces.

3 Misaligned Amino
 Numbering
The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4 Non-ASCII
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5 Variable Length.
Sequence(s) 5 contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6 PatentIn 2.0
 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7 Skipped Sequences
 (OLD RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8 Skipped Sequences
 (NEW RULES)
Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9 Use of n's or Xaa's
 (NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10 Invalid <213>
 Response
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11 Use of <220>
Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12 PatentIn 2.0
 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13 Misuse of n
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001

MAY
The type of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

U
Cancer
- ensure a minimum
of 1000 characters

PCT09

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001
 TIME: 09:46:14

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt
 Output Set: N:\CRF3\08302001\I719261.raw

4 <110> APPLICANT: Istituto Di Ricerche Di Biologia Molecolare P. Angeletti SpA
 5 Matassa, Victor
 6 Narjes, Frank
 7 Koehler, Konrad
 8 Ontoria, Jesus
 9 Poma, Marco

Does Not Comply
 Corrected Diskette Needed

11 <120> TITLE OF INVENTION: Peptide inhibitors of hepatitis C virus NS3 protease
 13 <130> FILE REFERENCE: KMN/FP5780044

15 <140> CURRENT APPLICATION NUMBER: 09/719,261

C--> 16 <141> CURRENT FILING DATE: 2001-07-23
 18 <150> PRIOR APPLICATION NUMBER: PCT/GB99/01824

19 <151> PRIOR FILING DATE: 1999-06-09

21 <150> PRIOR APPLICATION NUMBER: GB 9812523.0

22 <151> PRIOR FILING DATE: 1998-06-10

24 <160> NUMBER OF SEQ ID NOS: 13

26 <170> SOFTWARE: PatentIn Ver. 2.1

29 <210> SEQ ID NO: 1

30 <211> LENGTH: 4

31 <212> TYPE: PRT

32 <213> ORGANISM: Artificial Sequence

34 <220> FEATURE:

35 <221> NAME/KEY: SITE

36 <222> LOCATION: (1)

37 <223> OTHER INFORMATION: Xaa is diphenylalanine

39 <220> FEATURE:

40 <221> NAME/KEY: SITE

41 <222> LOCATION: (3)

42 <223> OTHER INFORMATION: Xaa is cyclohexylalanine

44 <220> FEATURE:

45 <221> NAME/KEY: SITE

46 <222> LOCATION: (4)

47 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid

49 <220> FEATURE:

50 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

51 sequence

53 <400> SEQUENCE:

W--> 54 Xaa Glu Xaa Xaa

55 1

59 <210> SEQ ID NO: 2

60 <211> LENGTH: 6

61 <212> TYPE: PRT

62 <213> ORGANISM: Artificial Sequence

64 <220> FEATURE:

65 <221> NAME/KEY: SITE

66 <222> LOCATION: (6)

67 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid

69 <220> FEATURE:

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001
TIME: 09:46:14

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt
Output Set: N:\CRF3\08302001\I719261.raw

70 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
71 sequence
73 <400> SEQUENCE: 2
W--> 74 Asp Glu Met Glu Glu Xaa
75 1 5
78 <210> SEQ ID NO: 3
79 <211> LENGTH: 6
80 <212> TYPE: PRT
81 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <221> NAME/KEY: SITE
85 <222> LOCATION: (3)
86 <223> OTHER INFORMATION: Xaa is diphenylalanine
88 <220> FEATURE:
89 <221> NAME/KEY: SITE
90 <222> LOCATION: (5)
91 <223> OTHER INFORMATION: Xaa is cyclohexylalanine
93 <220> FEATURE:
94 <221> NAME/KEY: SITE
95 <222> LOCATION: (6)
96 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid
98 <220> FEATURE:
99 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
100 sequence
102 <400> SEQUENCE: 3
W--> 103 Asp Glu Xaa Glu Xaa Xaa
104 1 5
107 <210> SEQ ID NO: 4
108 <211> LENGTH: 6
109 <212> TYPE: PRT
110 <213> ORGANISM: Artificial Sequence
112 <220> FEATURE:
113 <221> NAME/KEY: SITE
114 <222> LOCATION: (3)
115 <223> OTHER INFORMATION: Xaa is diphenylalanine
117 <220> FEATURE:
118 <221> NAME/KEY: SITE
119 <222> LOCATION: (5)
120 <223> OTHER INFORMATION: Xaa is cyclohexylalanine
122 <220> FEATURE:
123 <221> NAME/KEY: SITE
124 <222> LOCATION: (6)
125 <223> OTHER INFORMATION: Xaa is a fluorinated hydrocarbon side chain
127 <220> FEATURE:
128 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
129 sequence
131 <400> SEQUENCE: 4
W--> 132 Asp Glu Xaa Glu Xaa Xaa
133 1 5

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001
TIME: 09:46:14

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt
Output Set: N:\CRF3\08302001\I719261.raw

136 <210> SEQ ID NO: 5
 137 <211> LENGTH: 6
 138 <212> TYPE: PRT
 139 <213> ORGANISM: Artificial Sequence
 141 <220> FEATURE:
 142 <221> NAME/KEY: SITE Xaa may only represent a single amino acid
 143 <222> LOCATION: (6) Errored
 144 <223> OTHER INFORMATION: Xaa is a fluorinated hydrocarbon side chain
 146 <220> FEATURE:
 147 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 148 sequence
 150 <400> SEQUENCE: 5 ✓
 W--> 151 Asp Glu Met Glu Glu Xaa
 152 1 5
 155 <210> SEQ ID NO: 6
 156 <211> LENGTH: 5
 157 <212> TYPE: PRT
 158 <213> ORGANISM: Artificial Sequence
 160 <220> FEATURE:
 161 <221> NAME/KEY: SITE
 162 <222> LOCATION: (1)
 163 <223> OTHER INFORMATION: Asp as tertiary butyl ester
 165 <220> FEATURE:
 166 <221> NAME/KEY: SITE
 167 <222> LOCATION: (2, 4, 5)
 168 <223> OTHER INFORMATION: Glu as tertiary butyl ester
 170 <220> FEATURE:
 171 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 172 sequence
 174 <400> SEQUENCE: 6
 175 Asp Glu Met Glu Glu
 176 1 5
 179 <210> SEQ ID NO: 7
 180 <211> LENGTH: 5
 181 <212> TYPE: PRT
 182 <213> ORGANISM: Artificial Sequence
 184 <220> FEATURE:
 185 <221> NAME/KEY: SITE
 186 <222> LOCATION: (1)
 187 <223> OTHER INFORMATION: Asp as tertiary butyl ester
 190 <220> FEATURE:
 191 <221> NAME/KEY: SITE
 192 <222> LOCATION: (2, 4)
 193 <223> OTHER INFORMATION: Glu as tertiary butyl ester
 195 <220> FEATURE:
 196 <221> NAME/KEY: SITE
 197 <222> LOCATION: (3)
 198 <223> OTHER INFORMATION: Xaa is diphenylalanine
 200 <220> FEATURE:

May
 The type of errors shown exist throughout
 the Sequence Listing. Please check subsequent
 sequences for similar errors.

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001
TIME: 09:46:14

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt
Output Set: N:\CRF3\08302001\I719261.raw

201 <221> NAME/KEY: SITE
202 <222> LOCATION: (5)
203 <223> OTHER INFORMATION: Xaa is cyclohexylalanine
205 <220> FEATURE:
206 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
207 sequence
209 <400> SEQUENCE: 7
W--> 210 Asp Glu Xaa Glu Xaa
211 1 5
214 <210> SEQ ID NO: 8
215 <211> LENGTH: 17
216 <212> TYPE: PRT
217 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <221> NAME/KEY: MOD_RES
221 <222> LOCATION: (17)
222 <223> OTHER INFORMATION: AMIDATION
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
226 sequence.
228 <400> SEQUENCE: 8
229 Lys Lys Lys Gly Ser Val Val Ile Val Gly Arg Ile Ile Leu Ser Gly
230 1 5 10 15
232 Arg
235 <210> SEQ ID NO: 9
236 <211> LENGTH: 13
237 <212> TYPE: PRT
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
242 sequence
244 <400> SEQUENCE: 9
245 Asp Glu Met Glu Glu Cys Ala Ser His Leu Pro Tyr Lys
246 1 5 10
249 <210> SEQ ID NO: 10
250 <211> LENGTH: 4
251 <212> TYPE: PRT
252 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <221> NAME/KEY: SITE
256 <222> LOCATION: (1)..(3)
257 <223> OTHER INFORMATION: Phenylalanines are linked by an ether bond
259 <220> FEATURE:
260 <221> NAME/KEY: SITE
261 <222> LOCATION: (4)
262 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid
264 <220> FEATURE:
265 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
266 sequence

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001
TIME: 09:46:14

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt
Output Set: N:\CRF3\08302001\I719261.raw

268 <400> SEQUENCE: 10
W--> 269 Phe Glu Phe Xaa
270 1
273 <210> SEQ ID NO: 11
274 <211> LENGTH: 6
275 <212> TYPE: PRT
276 <213> ORGANISM: Artificial Sequence
278 <220> FEATURE:
279 <221> NAME/KEY: SITE
280 <222> LOCATION: (3)
281 <223> OTHER INFORMATION: Xaa is diphenylalafmine
283 <220> FEATURE:
284 <221> NAME/KEY: SITE
285 <222> LOCATION: (5)
286 <223> OTHER INFORMATION: Xaa is cyclohexylalanine
288 <220> FEATURE:
289 <221> NAME/KEY: SITE
290 <222> LOCATION: (6)
291 <223> OTHER INFORMATION: Xaa is 3-amino-5,5-difluoro-pentanoic acid
293 <220> FEATURE:
294 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
295 sequence
297 <400> SEQUENCE: 11
W--> 298 Asp Glu Xaa Glu Xaa Xaa
299 1 5
302 <210> SEQ ID NO: 12
303 <211> LENGTH: 5
304 <212> TYPE: PRT
305 <213> ORGANISM: Artificial Sequence
307 <220> FEATURE:
308 <221> NAME/KEY: SITE
309 <222> LOCATION: (2)
310 <223> OTHER INFORMATION: Xaa is diphenylalanine
312 <220> FEATURE:
313 <221> NAME/KEY: SITE
314 <222> LOCATION: (4)
315 <223> OTHER INFORMATION: Xaa is cyclohexylalanine
317 <220> FEATURE:
318 <221> NAME/KEY: SITE
319 <222> LOCATION: (5)
320 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid
322 <220> FEATURE:
323 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
324 sequence
326 <400> SEQUENCE: 12
W--> 327 Glu Xaa Ile Xaa Xaa
328 1 5
331 <210> SEQ ID NO: 13
332 <211> LENGTH: 6

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001
TIME: 09:46:15

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt
Output Set: N:\CRF3\08302001\I719261.raw

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:74 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:356 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13